

The Office Action mailed by the Office on December 28, 2001, Paper No. 5, rejected all pending claims as set forth below and identified the Examiner as David C. Finsmith. Upon review of the grounds for rejection of each of the pending claims, counsel for Applicants attempted to contact the Examiner to discuss options for placing the application in condition for allowance. After numerous attempts to contact Examiner Finsmith including detailed voice mail regarding the application, and receiving no response, counsel for Applicants attempted to contact the identified Examiner Supervisor, Charles Bowers. Unable to connect to the listed extension for Supervisor Bowers, counsel for Applicants contacted the Receptionist for Technology Center 2800 to obtain assistance contacting an Examiner or Supervisor responsible for the present application. Eventually, counsel for Applicants was contacted by a technology center supervisor, Olik Chaudhuri. Mr. Chaudhuri was unable to discuss the merits of the present application with counsel for Applicants. Counsel was instructed to submit a response, and upon receipt, Mr. Chaudhuri would be able to assign the present application to a new Examiner for examination. Counsel for Applicants was informed by Mr. Chaudhuri that the resulting communication from the Office would be a non-final Action enabling counsel to proceed to work with the new Examiner to discuss options for placing the present application in condition for allowance.

#### **Rejections under 35 U.S.C. § 102**

Claim 21 was rejected under 35 U.S.C. §102(e) as being unpatentable by Wang et al. (U.S. Patent No. 6,287,955). Applicants respectfully traverse this rejection and request reconsideration. Applicants note that the patent to Wang et al. has a priority date of June 9, 1999, and therefore the effective filing date of the application, June 30, 1999, is three months or less after the effective filing date of the patent (see MPEP §2308.01). Although Applicants submit that the patent to Wang et al. does not disclose each and every feature of Applicants' claimed invention, if the §102 rejection is maintained, Applicants request the Office to confirm that the Office is asserting that Applicants are claiming the *same invention* as that disclosed in the patent to Wang et al.

Wang et al. teach a process for forming a multi-layer intermetal dielectric structure. Several embodiments of the Wang et al. structure are described, essentially teaching "two or more dissimilar low-k dielectrics for the intermetal dielectrics of Cu-based dual damascene backends of integrated circuits" (col. 2, lines 7-9). Wang et al., however, do not teach a barrier layer disposed over the substrate, and therefore does not teach an inorganic dielectric layer disposed over the barrier layer.

Applicants respectfully submit that Wang et al. do not disclose each and every feature as claimed by Applicants, and therefore the present invention is patentable under 35 U.S.C. §102(e) over Wang et al. Applicants respectfully request reconsideration of this rejection.

5 **Rejections under 35 U.S.C. § 103**

Claims 29, 31, 34, 35, 36, and 38-41 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. Claims 22, 27, 28, and 30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Chang et al. (U.S. Patent No. 6,319,809). Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Wolf (Silicon Processing Volume 2). Claims 24, 33, and 37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Chao-Cheng Chen et al. (U.S. Patent No. 6,025,273) and Lai-Juh Chen et al. (U.S. Patent No. 5,858,869). Claim 26 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Jang et al. (U.S. Patent No. 6,165,898). Claim 32 was rejected under 35 U.S.C. §103(a) as being unpatentable over Wang et al. in view of Hong (U.S. Patent No. 6,069,058). Applicants respectfully traverse each and every rejection, and request reconsideration.

Applicants once again note as above in reference to the §102 rejection, the primary reference, the patent to Wang et al., recites priority to June 9, 1999 which is less than one year prior to Applicants' claimed priority of June 30, 1999 (see MPEP §715). Since the Office is issuing a §103 rejection of these claims, Applicants assume the Office is not asserting that the presently claimed invention is the *same invention* as that disclosed in the patent to Wang et al. Applicants, however, request affirmative clarification of the rejections and the characterization of the claimed invention in reference to the patent to Wang et al.


In the §102 rejection of Applicants' independent claim 21 addressed above, the Office asserts that the patent to Wang et al. discloses each and every feature claimed by the Applicants, including a barrier layer disposed over the substrate, and an inorganic dielectric layer disposed over the barrier layer. Applicants traverse this rejection as set forth above. In the §103 rejection of Applicants' independent claim 31, the Office asserts that the patent to Wang et al. teaches the claimed invention "except for a barrier layer over a base dielectric layer." Applicants respectfully request clarification as to whether the Office believes the patent to Wang et al. teaches or does not teach this feature.

The patent to Wang et al. forms the primary basis for each and every rejection issued by the Office. The clarification of the characterization of the reference is necessary for the Applicants to submit a proper response. By way of example, if the reference is said to teach the *same invention* as that claimed by the Applicants, the initiation of an interference may be

appropriate. If, however, the reference is said to not teach the same invention, then an affidavit under 37 CFR §1.31 may be appropriate. Additionally, amendment of Applicants' presently pending claims may advance the application to condition for allowance.

Applicants respectfully submit that the assurance of Mr. Chaudhuri that the resulting communication from this Response will be a non-final Action is appropriate. Counsel for Applicants is prepared to discuss the options for prosecution of the present application with the Examiner, when assigned, and the Examiner is kindly requested to contact the undersigned at (408) 749-6900, ext. 6905. If any additional fees are due in connection with this filing, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. LAM1P106D). A copy of the transmittal is enclosed for this purpose.

Respectfully submitted,  
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